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First Named Inventor	Dean Nobunaga	APPEAL BRIEF
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Title: ADJUSTABLE TIMING CIRCUIT OF AN INTEGRATED CIRCUIT		

APPEAL BRIEF

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Table of Contents

I.	Introduction	1
II.	Real Party in Interest	1
III.	Related Appeals and Interferences	2
IV.	Status of the Claims.....	2
V.	Status of Amendments	2
VI.	Summary of the Invention.....	3
VII.	Issue.....	3
VIII.	Grouping of claims.....	4
IX.	Arguments	4
X.	Conclusion.....	6
Appendix A		8

III. Related Appeals and Interferences

There are no other appeals or interferences known to Appellant which will have a bearing on the Board's decision in the present appeal.

IV. Status of the Claims

Claims 25-30 were allowed in an Advisory Action dated May 25, 2004. Claims 16-18 in addition to claims 25-30 were allowed in an Advisory Action dated September 20, 2004. Claims 1-15 and 19-24 have been canceled. Claims 31-40 have been presented on two occasions, first in an Amendment dated March 22, 2004, and again in a Response to Advisory Action dated June 21, 2004. On the first occasion, the Examiner refused to enter the claims (in Advisory Action dated May 25, 2004) stating that a corresponding number of finally rejected claims had not been canceled. In response, Appellant filed a Response to Advisory Action dated June 21, 2004, canceling claims 1-15 and 19-24, and re-presenting claims 31-40. Having received no response from the Examiner at the six month statutory date, Appellant filed its Notice of Appeal on July 20, 2004. In the Advisory Action dated September 20, 2004, the Examiner refused to enter dependent claims 31-40, stating that they require further consideration/search.

V. Status of Amendments

All amendments to claims 16-18 and 25-30 have been entered, and those claims are allowed. The Examiner has refused twice to enter allowable claims 31-40.

VI. Summary of the Invention

The claims at issue in this Appeal are dependent claims directed to specifics of the methods of adjusting signal timing circuits in certain of the allowed claims, as shown in the Figures of the pending application in various embodiments, and as described therein. The elements of the methods pertinent to the issues on appeal are shown throughout the specification. Specifically, Figures 5,6, and 7 of the application show timing diagrams for operation of the signal timing circuits. See also page 8, lines 3-19 of the specification for a description of the claim elements of the refused claims 31-40, which are identical or nearly identical to the examined and allowed claims 16-18.

Further details about various components of the methods outlined above are described and discussed at other sections of the specification. Such detailed discussions of the subject matter of the remaining claims are not limited to the specific sections of the specification recited above, but instead the entire detailed description contains discussion relating to the methods and embodiments of the present invention. However, attempt has been made to identify certain specially relevant sections of the specification to assist in the analysis of the claims.

VII. Issue

Were claims 31-40 properly refused entry despite their subject matter having been fully searched, and despite their having each been presented as dependent upon an allowed claim?

VIII. Grouping of Claims

Each claim stands alone for the purposes of this appeal.

IX. Arguments**The Claims**

Each of the dependent claims 31-40 depends directly from an allowed claim.

Each contains each and every limitation of its allowed base claim. Each of dependent claims 31-40 is facially allowable, since each is directly dependent from an allowed claim. Each of claims 31-40 also further defines the allowed claim from which it depends.

Further, the subject matter of dependent claims 31-33, 34-36, 37-38, and 39-40, has been searched, since the language of each of those claims appears either identically, or nearly identically, in examined and allowed claims 16-18.

Claim 31 adds the limitation to allowed claim 26 of a method of selecting signal propagation time length with selective coupling of one or more capacitors to a propagation path, subject matter examined and allowed with respect to claim 16 (dependent from claim 25).

Claim 32 adds the limitation to allowed claim 26 of more specifically defining the non-volatile fuse circuit, subject matter examined and allowed with respect to claim 17 (dependent from claim 25).

Claim 33 adds the limitation to allowed claim 26 of storing data from the non-volatile fuse circuit in a plurality of volatile latches, subject matter examined and allowed with respect to claim 17 (dependent from claim 25).

Claim 34 adds the limitation to allowed claim 27 of a method of selecting signal propagation time length with selective coupling of one or more capacitors to a propagation path, subject matter examined and allowed with respect to claim 16 (dependent from claim 25).

Claim 35 adds the limitation to allowed claim 27 of more specifically defining the non-volatile fuse circuit, subject matter examined and allowed with respect to claim 17 (dependent from claim 25).

Claim 36 adds the limitation to allowed claim 27 of storing data from the non-volatile fuse circuit in a plurality of volatile latches, subject matter examined and allowed with respect to claim 17 (dependent from claim 25).

Claim 37 adds the limitation to allowed claim 29 of a method of selecting signal propagation time length with selective coupling of one or more capacitors to a propagation path, subject matter examined and allowed with respect to claim 16 (dependent from claim 25).

Claim 38 adds the limitation to allowed claim 29 of more specifically defining the non-volatile fuse circuit, subject matter examined and allowed with respect to claim 17 (dependent from claim 25).

Claim 39 adds the limitation to allowed claim 30 of a method of selecting signal propagation time length with selective coupling of one or more capacitors to a

propagation path, subject matter examined and allowed with respect to claim 16 (dependent from claim 25).

Claim 40 adds the limitation to allowed claim 30 of more specifically defining the non-volatile fuse circuit, subject matter examined and allowed with respect to claim 17 (dependent from claim 25).

Appellant can find no reason why any further search or consideration is necessary, since each of the claims refused entry depends from an allowed claim, either directly or indirectly, and since the subject matter of the refused claims has already been searched.

X. Conclusion

Appellant respectfully submits that claims 31-40 which have been refused entry are facially allowable, as their subject matter has been fully searched, and since they depend from allowed claims and therefore contain each and every limitation of the allowed claims.

For at least the reasons discussed above, Appellant submits that the claims refused entry are allowable and should be entered, and a Notice of Allowance issued. Accordingly, Appellant requests that the Board of Appeals reverse the Examiner's decisions regarding the claims.

APPEAL BRIEF

7

Serial No. 09/648,857

Attorney Docket No. 400.002US01

Title: ADJUSTABLE TIMING CIRCUIT OF AN INTEGRATED CIRCUIT

Respectfully submitted,

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APPENDIX A**CLAIMS ON APPEAL**

16. The method of claim 25 wherein selecting the signal propagation time length comprises selectively coupling one or more capacitors to a propagation path of the signal timing circuit.
17. The method of claim 25 wherein the non-volatile fuse circuit comprises a plurality of floating gate transistors.
18. The method of claim 25 further comprises storing data from the non-volatile fuse circuit in a plurality of volatile latches.
25. A method of adjusting a signal timing circuit comprising:
- programming a non-volatile fuse circuit;
 - selecting a signal propagation time length in response to the programmed non-volatile fuse circuit; and
 - selecting a signal edge position in response to the programmed non-volatile fuse circuit;
- wherein selecting edge position comprises:
- selecting a single signal edge to move; and
 - moving the selected signal edge relative to other signal edges.

26. A method of adjusting a signal timing circuit comprising:
- programming a non-volatile fuse circuit;
 - selecting a signal propagation time length in response to the programmed non-volatile fuse circuit; and
 - selecting a signal edge position in response to the programmed non-volatile fuse circuit;
- wherein selecting a signal edge position comprises:
- selecting a signal edge to move;
 - moving the selected signal edge; and
 - moving other signal edges relative to the selected signal edge.
27. A method of adjusting a signal timing circuit comprising:
- programming a non-volatile fuse circuit;
 - selecting a signal propagation time length in response to the programmed non-volatile fuse circuit; and
 - selecting a signal edge position in response to the programmed non-volatile fuse circuit;
- wherein selecting a signal edge position comprises:
- selecting a subset of signal edges to move; and
 - moving each of the selected signal edges at the same time.
28. A method of adjusting a signal timing circuit comprising:
- programming a plurality of non-volatile fuses to store first data;
 - copying the first data from the plurality of non-volatile fuses to a plurality of latch circuits;

selecting a signal propagation time length in response to the first data stored in the plurality of latch circuits; and

selecting a signal edge position in response to the programmed non-volatile fuse circuit;

wherein selecting edge position comprises:

selecting a single signal edge to move; and

moving the selected signal edge relative to other signal edges.

29. A method of adjusting a signal timing circuit comprising:

programming a plurality of non-volatile fuses to store first data;

copying the first data from the plurality of non-volatile fuses to a plurality of latch circuits;

selecting a signal propagation time length in response to the first data stored in the plurality of latch circuits; and

selecting a signal edge position in response to the programmed non-volatile fuse circuit;

wherein selecting edge position comprises:

selecting a signal edge to move;

moving the selected signal edge; and

moving other signal edges relative to the selected signal edge.

30. A method of adjusting a signal timing circuit comprising:

programming a plurality of non-volatile fuses to store first data;

copying the first data from the plurality of non-volatile fuses to a plurality of latch circuits;

selecting a signal propagation time length in response to the first data stored in the plurality of latch circuits; and

selecting a signal edge position in response to the programmed non-volatile fuse circuit;

wherein selecting edge position comprises:

selecting a subset of signal edges to move; and

moving each of the selected signal edges at the same time.

31. The method of claim 26 wherein selecting the signal propagation time length comprises selectively coupling one or more capacitors to a propagation path of the signal timing circuit.

32. The method of claim 26 wherein the non-volatile fuse circuit comprises a plurality of floating gate transistors.

33. The method of claim 26 further comprises storing data from the non-volatile fuse circuit in a plurality of volatile latches.

34. The method of claim 27 wherein selecting the signal propagation time length comprises selectively coupling one or more capacitors to a propagation path of the signal timing circuit.

35. The method of claim 27 wherein the non-volatile fuse circuit comprises a plurality of floating gate transistors.

36. The method of claim 27 further comprises storing data from the non-volatile fuse circuit in a plurality of volatile latches.

37. The method of claim 29 wherein the wherein selecting the signal propagation time length comprises selectively coupling one or more capacitors to a propagation path of the signal timing circuit.

38. The method of claim 29 wherein the non-volatile fuse circuit comprises a plurality of floating gate transistors.

39. The method of claim 30 wherein the wherein selecting the signal propagation time length comprises selectively coupling one or more capacitors to a propagation path of the signal timing circuit.

40. The method of claim 30 wherein the non-volatile fuse circuit comprises a plurality of floating gate transistors.